

Integrated Chronic Disease Nurse Practitioner (ICDNP) Model of Care: Improving the Patient Journey

Ms Justine Hetherington¹, Mrs Cassandra Stone¹, Mrs Jennifer Abel¹, Mrs Maureen Barnes¹,
Prof Ann Bonner^{2,3}, Dr Clint Douglas², & Ms Kathryn Havas²

¹Chronic Disease Department, Logan Hospital, ²School of Nursing, Queensland University of Technology and
³Chronic Kidney Disease Centre for Research Excellence, The University of Queensland

BACKGROUND

Chronic diseases are currently responsible for more deaths than all other causes of death combined.¹ The increased prevalence of diseases such as Chronic Kidney Disease (CKD), Diabetes Mellitus (DM) and cardiovascular disease (CVD) and the high mortality associated with these diseases is increasingly being recognised as a global public health problem.²⁻⁴ This global burden of disease is fuelled by factors such as the increased prevalence of obesity, unhealthy life-style choices, and the aging population.^{1,5,6} These chronic diseases are highly prevalent in Australia and there is a well-established association between these three diseases. In view of this high association between these chronic diseases, many patients have a number of co-morbidities and suffer from more than one of these diseases.⁷⁻⁹ Historically, the management of each of these diseases has been in isolation or in disease silos with care delivered by medical practitioners and focusing on an individual chronic disease.^{10,11} As the demand on health care services increases, novel approaches in chronic disease management are being explored. In 2014 an Integrated Chronic Disease Nurse Practitioner (ICDNP) model commenced to provide streamlined care, improve access through a coordinated approach for patients with at least two of these three chronic diseases, and to improve the patient journey and quality of life.

AIM

To examine the perceptions of stakeholders following the introduction of the ICDNP clinic.

METHODS

Using a qualitative descriptive design, 14 patient interviews and 3 focus groups with staff (medical, allied health, nursing and administrative) were conducted. Data was analysed for themes.

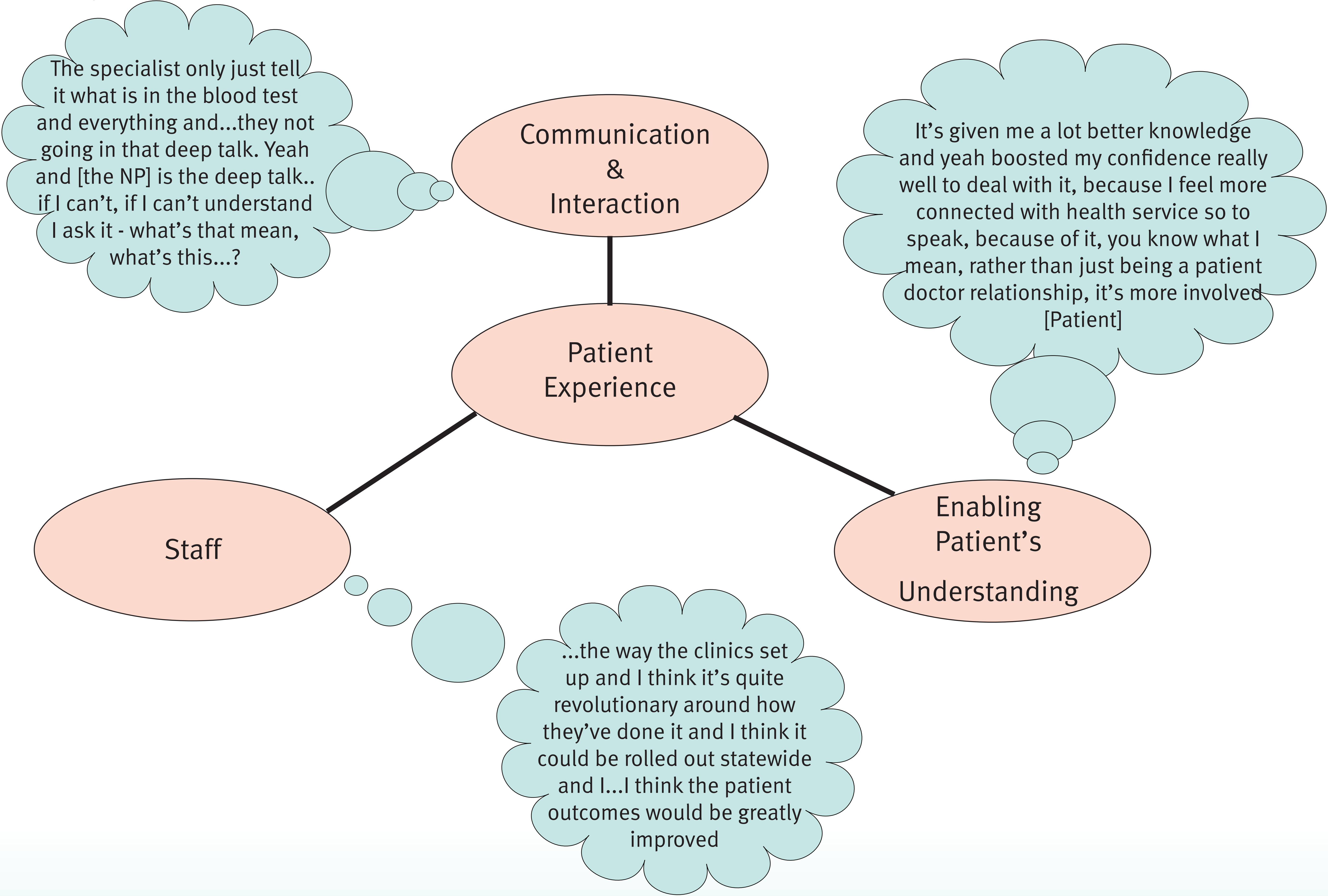
RESULTS

Overall patients described the benefits of attending the clinic (see figure 1) were due to:

- 1) the good communication and interaction with the nurse practitioners and
- 2) how this contributed to building trust and enabling them to have a better understanding of their chronic diseases.

Staff recognised the positive impact that the ICDNP clinic had on the patient’s navigation of the healthcare system, reducing the need for multiple clinic appointments, and how the clinic contributes to improving chronic disease self-management.

Figure 1: Themes and Data Excerpts



CONCLUSION

The ICDNP model of care has shown a high level of patient satisfaction with regard to the their journey of chronic disease self-management. Importantly healthcare professionals are supportive and engaged with the clinic due to improved communication and collaboration across multiple specialties and relevant team members.

REFERENCES

1. World Health Organization. 2014. Global status report on noncommunicable diseases. <http://www.who.int/nmh/publications/ncd-status-report-2014/en/> (accessed 3 August, 2015).
2. Jayasekara, K. B., D.M. Dissanayake, R. Sivakanesan, A. Ranasinghe, R.H. Karunaratna, and G.W.G. Kumara. 2014. Epidemiology of chronic kidney disease, with special emphasis in chronic kidney disease of uncertain etiology, in the North Central Region of Sri Lanka. *Journal of Epidemiology* 25 (4): 275-280.
3. Guha, K., and T. McDonagh. 2013. Heart failure epidemiology: European perspective. *Current Cardiology Reviews* 9 (2): 123-127.
4. Mahmood, S.S., D. Levy, S.V. Ramachandran, and T.J. Wang. 2014. The Framingham heart study and the epidemiology of cardiovascular disease: a historical perspective. *The Lancet* 383:999-1008.
5. Chen, L., D.J. Magliano, and P.Z. Zimmet. 2012. The worldwide epidemiology of type 2 diabetes mellitus – present and future perspective. *National Revolutionary Endocrine* 8:228-236.
6. Forouhi, N. G., and N.J. Wareham. 2014. Epidemiology of diabetes. *Medicine* 42 (12): 698-702.
7. Evans, P. D. and M.W. Taal. 2015. Epidemiology and causes of chronic kidney disease. *Medicine* 43 (8): 450-453.
8. McCalister, F., J. Ezekowitz, I. Tarantini, I. Squire, M. Komajda, A. Beyes-Genis, I. Gotsman, et al. 2012. Renal dysfunction in patients with preserved versus reduced ejection fraction. *Circulation: Heart Failure* 5:309-314..
9. Williams, E.D., L. Rawal, B.F. Oldenburg, C. Renwick, J.E. Shaw, and R.J. Tapp. 2012. Risk of cardiovascular and all-cause mortality: Impact of impaired health-related functioning and diabetes. *Diabetes Care* 35:1067-1073.
10. Baron, A., E. Bernard, and D. Stokesberry. 2011. Creating a diabetes chronic disease management program that works. *Physician Executive Journal* 37 (4): 32-39.
11. Chodosh, J., S.C. Morton, M. Walter, and M. Maglione. 2005. Meta-analysis: chronic disease self-management programs for older adults. *Annals of Internal Medicine* 143 (6): 427-438.